

Notice of Allowability

Application No.

10/727,130

Examiner

Lars A Olson

Applicant(s)

FISHER ET AL.

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 03 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12032003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Reasons for Allowance

1. Claims 1-10 are allowed.
2. The following is an examiner's statement of reasons for allowance. The marine propulsion system as claimed is not shown or suggested in the prior art because of the use of a system that is comprised of a support structure that is attachable to said marine propulsion system and to a marine vessel, said support structure being rotatable about a generally vertical steering axis and a generally horizontal tilting axis, a steering arm that is rotatable about said steering axis, a steering actuator with a first portion that is attached to said support structure, and a second portion that is attached in force transmitting relation with said steering arm, said steering actuator being in the form of a hydraulic actuator with said first portion being further comprised of a hydraulic cylinder, and said second portion being further comprised of a movable piston that is movable within said first portion in response to changes in hydraulic pressure between a first cavity and a second cavity of said hydraulic cylinder, a hydraulic pump with a pressurized outlet and a return inlet, and a valve that is connected in fluid communication between said hydraulic pump and said hydraulic cylinder, where said valve is responsive to movement of a steering device to control the flow of pressurized fluid from said hydraulic pump to said hydraulic cylinder, and to control the flow of return fluid from said hydraulic cylinder to said hydraulic pump.
3. The prior art as disclosed by Treinen et al. (US 6,402,577) shows the use of a marine propulsion system that is comprised of a support structure that is rotatable about

a generally vertical steering axis and a generally horizontal tilting axis, a steering arm that is rotatable about said steering axis, and a steering actuator with a first portion that is attached to said support structure, and a second portion that is attached in force transmitting relation with said steering arm, where said steering actuator is a hydraulic actuator, said first portion is a hydraulic cylinder, and said second portion is a movable piston within said first portion. Theisen et al. (US 6,454,620) discloses a marine propulsion system that includes a hydraulic pump, a hydraulic conduit that connects said hydraulic pump with a steering cylinder, a steering mechanism, and a pressure relief valve for limiting a hydraulic pressure within said hydraulic conduit. Wagner (US 5,658,177), Kobelt (US 5,601,463), Tsujii et al. (US 5,330,375) and Fetchko (US 5,213,527) disclose various steering systems with hydraulic actuators for marine propulsion units. However, none of the prior art cited shows or suggests the use of a marine propulsion system that is comprised of a support structure that is attachable to said marine propulsion system and to a marine vessel, said support structure being rotatable about a generally vertical steering axis and a generally horizontal tilting axis, a steering arm that is rotatable about said steering axis, a steering actuator with a first portion that is attached to said support structure, and a second portion that is attached in force transmitting relation with said steering arm, said steering actuator being in the form of a hydraulic actuator with said first portion being further comprised of a hydraulic cylinder, and said second portion being further comprised of a movable piston that is movable within said first portion in response to changes in hydraulic pressure between a first cavity and a second cavity of said hydraulic cylinder, a hydraulic pump with a


pressurized outlet and a return inlet, and a valve that is connected in fluid communication between said hydraulic pump and said hydraulic cylinder, where said valve is responsive to movement of a steering device to control the flow of pressurized fluid from said hydraulic pump to said hydraulic cylinder, and to control the flow of return fluid from said hydraulic cylinder to said hydraulic pump.

Conclusion

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
5. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

June 15, 2004


S. JOSEPH MORANO
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